

**GRAIN SORGHUM INSECTICIDE PERFORMANCE RATING, 2018**

	Chemistry	Restricted Entry Interval (hours)	Restricted Use (R)	Chinch Bug	Sorghum Webworm	Corn Earworm	Fall Armyworm	Fire Ants	Greenbug/Yellow Sugarcane Aphid/ Corn Leaf Aphid	Sugarcane Aphid	Sorghum Midge	Stink Bug
Cruiser	NEO	12		3				7	7	8		
Gaucho/Axcess/Senator	NEO	12		3				7	7	8		
NipsIt Inside/Poncho	NEO	12		7					7	8		
Asana XL/Adjourn	SyP	12	X	7	5	4	4		8	0	8	7
Baythroid XL	SyP	12	X	7	5	5	4		8	0	8	7
Belt	DM	12			7	7	7					
Besiege	DM+SyP	24	X	7	9	9	9		8	0	8	7
Blackhawk	SP	4			7	8	8	0	0	0	7	0
Dimethoate	OP	48		5	4		5		8	3	8	5
Karate Z/Silencer/Lambda-Cy/Warrior	SyP	24	X	7	5	5	4		8	0	8	7
Heligen	Misc	4				7						
Lannate	Car	48	X	5	8	8	8		7	3	6	5
Lorsban/Chlorpyrifos/Nufos	OP	24	X	5	6	5	7	7	8	4	6	5
Mustang Maxx/Respect	SyP	12	X	7	5	5	4		8	0	8	7
Prevathon	DM	4			9	9	9					
Prolex/Declare	SyP	24	X	7	5	5	4		8	0	8	7
Sevin	Car	12		7	7	6	7		5		6	5
Sivanto	BU	4								8		

**Rating Scale:** 0 = no control, 10 = excellent  
 Shaded boxes indicate products recommended for specific pests in this guide.

The performance ratings in the chart are for comparison purposes only and are not necessarily a measure of percent control.

**QUICK VIEW THRESHOLD GUIDE**

Insect	Threshold	Scouting Procedure
Sugarcane Aphid	25% infestation with at least 50 aphids per leaf	Scout field edges first – watch closely for expanding infestations
Whorl Feeders	3-6 larvae per whorl	Examine 25 plants in 4 spots (100/field)
Chinch Bug	When stand is threatened	Watch for yellowing/reddening and/or twisting of leaves Check under leaf sheath near soil line for chinch bugs
Greenbug	Plants up to 6 inches – visible damage with colonies present 6 inches to preboot – treat before entire leaves die Preboot to hard dough – treat when 2 or more entire leaves die	Examine 25 plants in 4 spots (100/field)
Yellow Sugarcane Aphid	1 aphid per seedling	Examine 25 plants in 4 spots (100/field)
Sorghum Midge	1 adult midge per head when 25%-30% of plants are flowering	
Corn Earworm/Fall Armyworm	1 larvae 1/2-inch long or longer per head	
Sorghum Webworm	5 larvae per head	
Stink Bug	5 per head from flowering to soft dough 16 per head during hard dough	

**GRAIN SORGHUM INSECT CONTROL**

<b>Insect</b>	<b>Insecticide</b>	<b>Formulation/Acre</b>	<b>Lb ai/Acre</b>	<b>Acres/Gallon</b>	<b>Application/Comments</b>	<b>Minimum Days From Last Application to Harvest</b>	
<b>Chinch Bug</b> On seedling grain sorghum (6" or less), apply foliar sprays when stand is threatened. On taller plants, apply controls when immature and adult bugs infest 75% of the plants.	<b>At Planting Treatments:</b>						
	clothianidin				Apply soil-applied treatments in areas with a history of high populations of chinch bugs.		
	Poncho 600	5.1-6.4 oz/100 lb seed					
	NipsIt Inside 5 F	5.1-6.4 oz/100 lb seed					
	imidacloprid				Cruiser, Gaucho, Access, Senator, NipsIt and Poncho will give early season suppression of chinch bugs.		
	Gaucho 5 FS	6.4 oz/100 lb seed					
	Access 5 FS	6.4 oz/100 lb seed					
	Senator 5 FS	6.4 oz/100 lb seed					
	thiamethoxam						
	Cruiser 5 FS	5.1-7.6 oz/100 lb seed					
	<b>Foliar-Applied Treatments:</b>						
	beta-cyfluthrin (R)			0.019-0.022		Use 20-30 gal of water per acre. Direct sprays toward infested areas.	14
	Baythroid XL 1 EC	2.0-2.8 oz			45.7-98.5		
carbaryl			1.0-2.0			21 (grain)	
Sevin 80 S	1.25-2.5 lb					14 (forage)	
esfenvalerate (R)			0.03-0.05			21	
Asana XL 0.66 EC	5.8-9.6 oz			13-22			
<i>(See Generic Insecticides)</i>							
gamma-cyhalothrin 1.25 CS (R)			0.015			30	
Prolex/Declare	1.54 oz			83			
lambda-cyhalothrin (R)			0.03			30	
Warrior II 2.08 CS	1.92 oz			67			
<i>(See Generic Insecticides)</i>							
zeta-cypermethrin 0.8 EC (R)			0.02-0.025			14 (grain & forage)	
Mustang Maxx/Respect	3.2-4.0 oz			32-40		45 (fodder)	
<b>Sugarcane Aphid</b>	<b>At Planting Treatments:</b>				Seed treatments have been shown to provide early season control of this pest.		
	clothianidin						
	Poncho 600	5.1-6.4 oz/100 lb seed					
	NipsIt Inside 5 F	5.1-6.4 oz/100 lb seed					
	imidacloprid						
	Gaucho 5 FS	6.4 oz/100 lb seed					
	Access 5 FS	6.4 oz/100 lb seed					
	Senator 5 FS	6.4 oz/100 lb seed					
	thiamethoxam						
	Cruiser 5 FS	5.1 oz/100 lb seed					
<b>Foliar-Applied Treatments:</b>							
flupyradifurone			0.052-0.09		DO NOT apply more than 28 oz per acre per season.	14 (grain)	
Sivanto 1.67 SL	4.0-7.0 oz			18.3-32		7 (forage)	

GRAIN SORGHUM INSECT CONTROL

Insect	Insecticide	Formulation/Acre	Lb ai/Acre	Acres/Gallon	Application/Comments	Minimum Days From Last Application to Harvest
<b>Greenbug, Corn Leaf Aphid, Yellow Sugarcane Aphid</b>	<b>At Planting Treatments:</b>				Cruiser, Gaucho, Access, Senator, NipsIt and Poncho will give early-season suppression of chinch bugs and aphids.  Apply sprays when infestation occurs. <b>Yellow Sugarcane Aphid:</b> Treat for 1 aphid per seedling plant or when damage occurs on larger plants. Aphid feeding causes seedling plants to turn purple, similar to phosphate deficiency. <b>Greenbug treatment levels:</b> Emergence to 6 inches high, treat for visible damage with colonies of greenbugs on plants. Larger plants to pre-boot, treat before any entire leaves are killed. Pre-boot to hard dough, treat when greenbug numbers are sufficient to cause death of more than two normal-sized leaves. DO NOT apply more than 3 times. <b>Other Aphids:</b> Control is seldom justified unless plant growth is inhibited. DO NOT apply more than 3 times.	
	clothianidin					
	Poncho 600	5.1-6.4 oz/100 lb seed				
	NipsIt Inside 5 F	5.1-6.4 oz/100 lb seed				
	imidacloprid					
	Gaucho 5 FS	6.4 oz/100 lb seed				
	Access 5 FS	6.4 oz/100 lb seed				
	Senator 5 FS	6.4 oz/100 lb seed				
	thiamethoxam					
	Cruiser 5 FS	5.1-7.6 oz/100 lb seed				
	<b>Foliar-Applied Treatments:</b>					
	chlorpyrifos (R)		0.25-0.5			30
	Lorsban 4 EC (See Generic Insecticides)	0.5-1.0 pt		8-16		
	dimethoate		0.25-0.5			28
	Dimethoate 4 E	0.5-1.0 pt		8-16		
	Dimethoate 5 E	6.4-12.8 oz		10-20		
	Dimethoate 2.67 E	0.75-1.5 pt		5.3-10.7		
<b>Sorghum Midge</b>	beta-cyfluthrin (R)		0.008-0.01			14
	Baythroid XL 1 EC	1.0-1.3 oz		98-128		
	chlorpyrifos (R)		0.25			30
	Lorsban 4 EC (See Generic Insecticides)	0.5 pt		16		
	dimethoate		0.125-0.25			28
	Dimethoate 4 E	0.25-0.5 pt		16-32		
	Dimethoate 5 E	3.2-6.4 oz		20-40		
	Dimethoate 2.67 E	6-12 oz		10.7-21.3		
esfenvalerate (R)		0.015-0.03			21	
Asana XL 0.66 EC (See Generic Insecticides)	2.9-5.8 oz		22-44			
gamma-cyhalothrin 1.25 CS (R)		0.0075-0.01			30	
Prolex/Declare	0.77-1.02 oz		125-167			
spinosad		0.034-0.075			21	
Blackhawk	1.5-3.3 oz					

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<b>Sorghum Midge</b> (cont.)	lambda-cyhalothrin (R) Warrior II 2.08 CS <i>(See Generic Insecticides)</i>	0.96-1.28 oz	0.015-0.02	100-133		30
	methomyl (R) Lannate 2.4 LV	0.75-1.5 pt	0.22-0.45	5.3-10.6		14
	zeta-cypermethrin 0.8 EC (R) Mustang Maxx/Respect	1.28-4.0 oz	0.008-0.025	32-100		14 (grain & forage) 45 (fodder)
<b>Corn Earworm</b>	<b>Carbamates</b> methomyl (R) Lannate 2.4 LV	0.75-1.5 pt	0.22-0.45	5.3-10.7	<b>Whorl Stage:</b> Damage seldom occurs, but extremely high populations of 3-6 worms per plant may justify treatment. Use 20-30 gal per acre directed into whorls.	14
	carbaryl Sevin XLR or 4 F	3-4 pt	1.5-2.0	2.0-2.7	<b>Heading: Corn Earworm</b> – Treat when numbers exceed an average of 1 larvae per head, 1/2 inch in size, in maturing sorghum.	21 (grain) 14 (forage)
	<b>Other Chemistry</b> chlorantraniliprole Prevathon	14-20 oz	0.047-0.067	6.4-9.14	Resistance or tolerance to synthetic pyrethroid insecticides is developing in the corn earworm. If less than satisfactory control is achieved after a pyrethroid application, rotate to another chemistry.	14
	flubendiamide Belt 4 SC	2-4 oz	0.0625-0.125	32-64		14
	nucleopolyhedrovirus Heligen	0.7-1.4 oz		91.4-183	Apply before reaching economic threshold targeting small larvae. Applications on large larvae often result in poor control. Larvae stop feeding within 1-3 days and die within 3-9 days.	0
	spinosad Blackhawk	1.67-3.3 oz	0.038-0.075			21 (grain) 3 (forage)
<b>Fall Armyworm, Sorghum Webworm</b>	carbaryl Sevin XLR	3-4 pt	1.5-2.0	2.0-2.7	<b>Heading: Fall Armyworm</b> – Treat when numbers exceed an average of 1 larvae per head, 1/2 inch in size, in maturing sorghum.	21 (grain) 14 (forage)
	chlorantraniliprole Prevathon	14-20 oz	0.047-0.067	6.4-9.14	<b>Sorghum Webworm:</b> Treat when an average of 5 small larvae are found per head. Use higher rate for sorghum webworm.	14
	flubendiamide Belt 4 SC	2-4 oz	0.0625-0.125	32-64		14
	methomyl (R) Lannate 2.4 LV	0.75-1.5 pt	0.22-0.45	5.3-10.7		14
	spinosad Blackhawk	1.67-3.3 oz	0.038-0.075			21 (grain) 3 (forage)

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<b>Stink Bugs</b>	beta-cyfluthrin (R) Baythroid XL 1 EC	1.3-2.8 oz	0.01-0.022	45.7-98.5		14
	gamma-cyhalothrin 1.25 CS (R) Prolex/Declare	1.02-1.54 oz	0.01-0.015	83-125		30
	lambda-cyhalothrin (R) Warrior II 2.08 CS (See Generic Insecticides)	1.28-1.92 oz	0.02-0.03	66.7-100		30
	zeta-cypermethrin 0.8 EC (R) Mustang Maxx/Respect	1.28-4.0 oz	0.008-0.025	32-100		14 (grain & forage) 45 (fodder)
<b>Fire Ants</b>	imidacloprid Gaucho 5 FS Access 5 FS Senator 5 FS	6.4 oz/100 lb seed 6.4 oz/100 lb seed 6.4 oz/100 lb seed			Seed treatment	
	thiamethoxam Cruiser 5 FS	5.1-7.6 oz/100 lb seed			Seed treatment	
<b>Multiple Species</b>	lambda-cyhalothrin + chlorantraniliprole (R) Besiege 1.25 SC	5-10 oz	0.05-0.1	12.8-25.6	For control of multiple pests including chinch bugs, sorghum midge, fall armyworm, corn earworm, sorghum webworm and stink bug.	30